

## **IN THE CLAIMS**

1 (Currently Amended). A method comprising:  
establishing a serial physical link; ~~and~~  
providing isochronous support by a software control on the serial physical link; and  
providing a plurality of different channel mapping schemes and enabling the  
selection of one of said schemes.

2 (Original). The method of claim 1 further including providing synchronous support by a software control on the serial physical link.

3 (Original). The method of claim 1 further including providing asynchronous support by a software control on the serial physical link.

4 (Original). The method of claim 1 further including providing separate logical and physical layers.

5 (Original). The method of claim 4 including providing a multiplexer in the physical layer coupled to the logical layer.

6 (Original). The method of claim 5 including coupling a baseband processor to said physical layer.

7 (Original). The method of claim 5 including coupling an applications processor to said physical layer.

Claim 8 (Canceled).

9 (Currently Amended). The method of claim 1 ~~-8-~~ including providing a channel mapping scheme in which each of a plurality of classes has its own channel and multiplexing logical channels with the same priority in round robin fashion.

10 (Currently Amended). The method of claim 1 -~~8~~ including dynamically assigning channels on a first come, first served basis.

11 (Currently Amended). The method of claim 1 -~~8~~ including assigning a plurality of channels to conversational service and providing a plurality of multiplexed channels for other services.

12 (Currently Amended). An article comprising a medium storing instructions that enable a processor-based system to:

establish a serial physical link; ~~and~~

provide isochronous support by a software control on the serial physical link; and

provide a plurality of different channel mapping schemes and enable the selection of one of said schemes.

13 (Original). The article of claim 12 further storing instructions that enable a processor-based system to provide synchronous support by a software control on the serial physical link.

Claim 14 (Canceled).

15 (Currently Amended). The article of claim 12 ~~14~~ further storing instructions that enable a processor-based system to provide a channel mapping scheme in which each of a plurality of classes has its own channel and multiplex logical channels with the same priority in round robin fashion.

16 (Currently Amended). The article of claim 12 ~~14~~ further storing instructions that enable a processor-based system to dynamically assign channels on a first come, first served basis.

17 (Currently Amended). The article of claim 12 ~~14~~ further storing instructions that enable a processor-based system to assign a plurality of channels to conversational service and provide a plurality of multiplexed channels for other services.

18 (Currently Amended). An apparatus comprising:  
a serial physical link to provide ~~that provides~~ isochronous support by a software control on the serial physical link; ~~and~~  
a logical layer control to interface with said physical link; and  
a control to provide a plurality of different channel mapping schemes and enable the selection of one of said schemes.

19 (Original). The apparatus of claim 18 wherein said link provides asynchronous support by a software control on the serial physical link.

20 (Original). The apparatus claim 19 wherein said link provides synchronous support by a software control on the serial physical link.

21 (Original). The apparatus of claim 19 wherein said physical layer control is coupled to said logical layer control.

22 (Original). The apparatus of claim 21 wherein said physical layer control includes a multiplexer coupled to the logical layer control.

23 (Original). The apparatus of claim 22 including a baseband processor coupled to said physical layer control.

24 (Original). The apparatus of claim 22 including an applications processor coupled to said physical layer control.

Claim 25 (Canceled).

26 (Currently Amended). The apparatus of claim 18 ~~25~~ including a control to provide a channel mapping scheme in which each of a plurality of classes has its own channel and to multiplex logical channels with the same priority in round robin fashion.

27 (Currently Amended). The apparatus of claim 18 ~~25~~ including a control to dynamically assign channels on a first come, first served basis.

28 (Currently Amended). The apparatus of claim 18 ~~25~~ including a control to assign a plurality of channels to conversational service and to provide a plurality of multiplexed channels for other services.